

AMERICAN ANNALS OF THE DEAF

FOUNDED 1847

Official Organ

Conference of Executives of American Schools for the Deaf

FOUNDED 1868

American Instructors of the Deaf

FOUNDED 1850

POWRIE VAUX DOCTOR, Ph.D.

Editor

ELIZABETH E. BENSON, M.A., LL.B.

Associate Editor

*Under the Direction of the Executive Committee
of the Conference*

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Volume 110

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THE CONFERENCE OF EXECUTIVES OF AMERICAN SCHOOLS FOR THE DEAF

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THE CONFERENCE OF EXECUTIVES OF AMERICAN SCHOOLS FOR THE DEAF, originally the Conference of Superintendents and Principals of American Schools for the Deaf, was founded in 1868 and subsequently incorporated under the laws of the State of Maryland in 1958. The Conference is an organization of the executive heads of schools for the deaf in the United States and Canada, and has for its object "to promote the management and operation of schools for the deaf along the broadest and most effective lines and to further and promote the general welfare of the deaf."

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THE AMERICAN INSTRUCTORS OF THE DEAF, founded in 1850 and incorporated by act of Congress in 1897, is an organization of educators of the deaf in the United States and Canada with the great object of "promotion of the education of the deaf on the broadest, most advanced, and practical lines," and for that purpose "to secure the harmonious union in the organization, of all persons actually engaged in educating the deaf in America."

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The American Annals of the Deaf

The AMERICAN ANNALS OF THE DEAF was founded in 1847 at the American School for the Deaf in Hartford, Connecticut, by the members of the faculty of that school, which is the first free public school for the deaf in America. Although the journal received the approval of the administrative school authorities, the periodical was first entirely sponsored by the members of the faculty. After two years the ANNALS was discontinued for some months but was revived by the members of the American Instructors of the Deaf in their first meeting in New York, N. Y., in 1850.

In June, 1861, the publication ceased because of the War Between the States, inasmuch as the membership was made up of northerners and southerners in almost equal proportion. In September, 1868, the AMERICAN ANNALS OF THE DEAF resumed publication with the editorial office on Kendall Green, in Washington, D. C., where it has since remained.

The AMERICAN ANNALS OF THE DEAF is the official organ of the Conference of Executives of American Schools for the Deaf, which was organized in 1868, and of the American Instructors of the Deaf, founded in 1850. According to the Library of Congress it is the oldest educational publication in the United States still in existence. It is also the oldest journal on the education of the deaf in the world.

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AMERICAN ANNALS OF THE DEAF

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No. 4

ANNOUNCEMENTS

Official Call for the Meeting of the Conference

The thirty-eighth regular meeting of the Conference of Executives of American Schools for the Deaf will be held at Hot Springs, Arkansas, April 24-29, 1966, at the Velda Rose Tower and Motel, for the purpose of conducting the necessary business, and the election of officers, and such other business as may properly come before the meeting.

Hugo F. Schunhoff, President
Lloyd A. Harrison, Secretary

A Regional Meeting of The Alexander Graham Bell Association for the Deaf will be held in Toronto, Canada, October 1 and 2, 1965, at the Royal York Hotel.

Official Call for the Convening of an International Congress on Education of the Deaf

"An international congress on education of the deaf will be held at The Clarke School for the Deaf, Northampton, Massachusetts, and the Lexington School for the Deaf, New York, New York, June 18-24, 1967, with the cooperation of the Horace Mann School for the Deaf, Roxbury, Massachusetts, and the Alexander Graham Bell Association for the Deaf, Washington, D. C."

George T. Pratt, President, The Clarke School for the Deaf
Co-Chairman, International Congress

Clarence D. O'Connor, Superintendent, The Lexington School for the Deaf,
Co-Chairman, International Congress

Bill G. Blevins, Assistant to the President, The Clarke School for the Deaf
Co-ordinator, International Congress

Leo E. Connor, Assistant Superintendent, The Lexington School for the Deaf,
Co-ordinator, International Congress

A Sociometric Investigation of the Self-Concept of The Deaf Child*

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Salem, Oregon

Introduction

Because the deaf child is deprived of significant amounts of stimulation and informational feed-back from his environment, he has less data available upon which to base his self-image. This observation suggests the possibility that his self-concept differs from that of the non-deaf child, but neither the existence nor the dimensions of this difference have been verified. To date, experimental investigation has been lacking on this crucial facet of the deaf child's development.

Communication, the central problem of the deaf child, is also a central issue in the theoretical considerations of self-concept. The sources reviewed are in fairly general agreement on the origins of self in social interaction; and, as social interaction presupposes adequate transfer of emotions and ideas, the importance of communication is inherent in these theories. Although allowing for the existence of some pre-language interaction, most of the literature supports Mead's¹ contention that the "language process is essential for the development of the self." That is, not until an individual can get into communication with other persons through symbols which arouse in himself the responses they arouse in others can he gain a mental content or self.

In the specific area of the deaf, theoretical commentaries and some research have touched on this area of self-concept. Meyerson's² application to the deaf of Lewin's field theory is especially pertinent. As Meyerson points out, the deaf child is put into a new psychological situation, unstructured and unmapped, every time he encounters a situation for which he has no words. As his perception of the situation varies so his actions vacillate. Adjustment to this encounter varies with the individual, commonly: (1) withdrawal to the world of the deaf and rejection of the world of the normally hearing; (2) aspiration to the world of the normally hearing and rejection of the world of the deaf; and (3) entrance into "the large area of commonality that exists between those who have impaired hearing and those who have normal hearing."³ Although recognizing that any of the patterns may fit a particular child, Meyerson emphasizes the basic advantages of the third pattern. The barriers of deafness "need not surround the person, but only certain areas of the

* This article is based on a Master's thesis completed at Willamette University, Salem, Oregon, under the direction of Dr. James R. Lyles.

¹ George Herbert Mead, *Mind, Self, and Society* (Chicago: University of Chicago Press, 1934), pp. 135-226.

² Lee Meyerson, "A Psychology of Impaired Hearing," *Psychology of Exceptional Children and Youth*, William M. Cruickshank, editor (Englewood Cliffs: Prentice-Hall, Inc., 1955), pp. 150-177.

³ *Ibid.*

life space," and a recognition of the actual boundaries aids in mapping the new psychological situations which arise. Along this same line, Barker⁴ sees one of the fundamental characteristics of the psychological situation of the deaf as a "lack of any clear differentiation between the things they can do and the things obviously beyond their reach," again, a lack of clear boundaries.

Research efforts toward defining the characteristic personality of the deaf child have been hampered by the language handicap itself. Test validity is severely impaired when the language of the test becomes as much or more of an issue than the task to be tested.

As tests of social maturity do not rely strictly upon the child's own evaluation of himself, studies of the social maturity of the deaf may be considered valid. They have also been fairly consistent. Although the studies⁵ have differed, the results have varied directly with the existence or extent of institutional living, a strong indication that institutionalization need be considered in any study of the deaf child's personality.

Several Rorschach analyses⁶ have indicated responses for the deaf subjects similar to those of rigid neurotic persons with normal hearing, but the necessary variations from standard Rorschach administration procedure reduce the validity of the reports. In addition to the Rorschach, McAndrew⁷ administered laboratory tests for satiation, level of aspiration, and ability to restructure by classification. Here, again, problems of test interpretation may be raised, and institutionalization was not controlled.

In the results of her Personality Inventory, Brunschwig⁸ found personality differences between the deaf and the non-deaf in response to items of social relationships and self-estimates. The deaf tended to have a smaller number of playmates at a time, to engage more frequently in solitary activities, and to prefer the company of adults to a greater degree than non-deaf children. They also tended to rate themselves superior to other children, as prettier or smarter. Brunschwig's study was not controlled for institutionalization, and neither it nor any of the preceding studies set out to investigate self-concept per se.

⁴ Roger G. Barker, et al., *Adjustment to Physical Handicap and Illness: A Survey of the Social Psychology of Physique and Disability* (New York: Social Science Research Council, 1953), p. 239.

⁵ Alice Streng and S. A. Kirk, "The Social Competence of Deaf and Hard-of-Hearing Children in a Public Day School," *American Annals of the Deaf*, LXXXIII (1938), 244-254; Charlotte B. Avery, "The Social Competence of Preschool Acoustically Handicapped Children," *Journal of Exceptional Children*, XV (1948), 71-73; Katherine P. Bradway, "The Social Competence of Deaf Children," *American Annals of the Deaf*, LXXXII (1937), 122-140; and E. M. L. Burchard and H. R. Myklebust, "A Comparison of Congenital and Adventitious Deafness with Respect to Its Effect on Intelligence, Personality, and Social Maturity, Part II: Social Maturity," *American Annals of the Deaf*, LXXXVII (1942), 241-250.

⁶ Edna S. Levine, *An Investigation into the Personality of Normal Deaf Adolescent Girls* (Doctoral Dissertation, New York University, 1948, University Microfilms No. 1156), cited by Barker, *op. cit.*, pp. 201-203; J. P. Altable, "The Rorschach Psychodiagnostic as Applied to Deaf-Mutes," *Rorschach Research Exchange and Journal of Projective Techniques*, XI (1947), 74-79, cited by Barker, *op. cit.*; and Helton McAndrew, "Rigidity and Isolation: A Study of the Deaf and the Blind," *Journal of Abnormal and Social Psychology*, XLIII (October, 1948), 476-494.

⁷ McAndrew, *loc. cit.*

⁸ Lily Brunschwig, *A Study of Some Personality Aspects of Deaf Children* (New York: Teachers College, Columbia University, 1936), cited by Barker, *op. cit.*, 200; 251-252.

The purpose of the present study was to determine experimentally whether or not the deaf child's self-concept is different from that of the normally hearing child. To minimize the instrument problem in assessment of personality, Schiff's⁹ sociometric measure of perceptual-judgmental response sets was specifically adapted to a basal language level. In accordance with that instrument, the scope of the study was limited to the concept of self in familiar situations and with familiar people, the perceptions deemed basic to self-evaluation in more extended contacts and in new psychological situations. The focus was on concepts of self and other as manifested in the following areas of sociometric perception: (1) degree of accuracy in perception of others' ratings of self, (2) direction of errors in perception (self-effacement or self-enhancement), (3) general self-acceptance (without regard to accuracy), and (4) tendency to accept others.

PROCEDURES

I. THE SUBJECTS

Population Selection

The 48 subjects for this study were drawn in equal numbers from three different school populations: (1) the Oregon State School for the Deaf, a residential school in Salem, Oregon; (2) Hosford School, Deaf Department, a day school in Portland, Oregon; and (3) Highland Elementary School, a public school for the hearing in School District 24J, Salem, Oregon.

The day school for the deaf was chosen to control for a possible institutional variable, and the public school for the non-deaf was chosen to control for hearing. The largest number of eligible students was chosen from the smallest school (day deaf). These children were matched by children from the residential school for the deaf and again by children from the public school. The selection of children from these latter two settings was by random number from a larger group of candidates according to the sex distribution, within the age, class, and intelligence range, and (for the deaf residential group only) within the hearing loss range of the day deaf students.

Control of Population Variables

The influence of such variables as length of acquaintance, age, class, sex distribution, intelligence, and hearing loss was controlled by population selection.

Length of acquaintance. All children selected had been in school attendance with the other members of their group for at least three months prior to the sociometric testing.

Age range. The children were chosen according to age rather than

⁹ Herbert M. Schiff, "Judgmental Response Sets in the Perception of Sociometric Status," *The Sociometry Reader*, J. L. Moreno, editor, (Glencoe, Illinois: The Free Press, 1960), pp. 684-707.

grade equivalents due to the language-imposed discrepancy between age and grade in schools for the deaf. The ages ranged from 9½ to 12 years, or sixth grade in the public school. This range was selected to insure both a sufficient population number in the smallest school and a population old enough to understand the task in all schools.

Class range. As the number of children in classes for the deaf is much smaller than in classes for the non-deaf, the deaf children were of necessity selected from different classrooms in the same school, rather than all from the same room. To minimize this variable, the non-deaf children were also selected from the different sixth grade classrooms in their school.

Sex distribution. Sex distribution was held constant with 10 boys and 6 girls selected from each school.

Intelligence. The intelligence level of all three populations was controlled and was closely similar in both mean and range. The mean IQ for the non-deaf population was 105; for the deaf non-institutional, 107; and for the deaf institutional, 107. The range for the non-deaf group was from 86 to 122; for the deaf non-institutional, 86–125; and for the deaf institutional, 90–125. No children were used who were mentally retarded or who were considered aphasic.

Hearing loss. No children were accepted whose hearing loss was less than 65 decibels for the speech range in the better ear nor whose hearing loss had been acquired after acquisition of language. This eliminated two possible variables: (1) the psychological differences between the hard of hearing child and the deaf child, and (2) the difference in language sense of either the post-lingually deaf or the hard of hearing child and the pre-lingually deaf child.

The mean hearing loss in the speech range for the deaf non-institutional group was 87.5 decibels, with a range from 67 decibels to 110 decibels. The mean loss for the deaf institutional group was 91.8 decibels, ranging from 68 decibels to 110 decibels. The non-deaf group had no measured loss.

Socio-economic status. Although the socio-economic status of the children could not be controlled completely, the populations chosen were similar in parental occupations. The school for the non-deaf was selected primarily on the basis that it drew from a population closely corresponding to the socio-economic level of the deaf children selected.

A further comparison of subjects can be seen in the accompanying chart, Table I.

II. THE INSTRUMENT

The instrument developed to measure self-concept was a perceptual sociometric test similar to that used by Schiff,¹ but adapted for the deaf. This measure compares predicted sociometric ratings with actual sociometric ratings to give an index of perceived self. It was selected because

¹ Schiff, *op cit.*, pp. 684–707

it provided a task which was familiar, relevant, and meaningful, without the language loading of other available measures.

Format of Test

The test consisted of two illustrated situations involving sociometric choice, with two types of ratings made for each. Two types of situations were used to provide for possible choice differences in different situations. One situation was informal or recreational, with the first rating as selection of others from the names of the 15 other classmates:

You are going to the beach. Choose the boys and girls you want to go with you. Put each name in a pile. Will you take?

The second rating in this situation involved perception of the choices of the others:

..... is going to the beach. He can choose the boys and girls he wants to go with him. Will he take you? Put your name in a pile.

The second situation was more formal or academic, involving the following questions:

You are going to a new room. Choose the boys and girls you want to sit near you. Put each name in a pile. Do you want?

..... is going to a new room. He can choose the boys and girls

TABLE I

COMPARISON OF SUBJECTS IN I.Q., HEARING LOSS, AGE, AND SEX

Variables	Deaf Institutional	Deaf Non-Inst.	Non-Deaf Non-Inst.
IQ:			
Mean IQ	107	107	105
Range	90 to 125	86 to 125	86 to 122
Hearing Loss			
Mean loss	91.8 db	87.5 db	no loss
Range	68 db to 110 db	67 db to 110 db	no loss
Age:			
Mean Age	12 yr. 0 mo.	11 yr. 6 mo.	11 yr. 6 mo.
Range	11-0 to 12-11	9-4 to 12-11	11-1 to 12-4
Sex:			
Boys	10	10	10
Girls	6	6	6

he wants to sit near him. Will he want you? Put your name in a pile.

Each child was given a chart upon which to place the name cards in three different choice categories: (1) Yes, (2) Maybe, and (3) No. He was required to place all 15 names in some category but was free to choose the number to go in each. The charts used are reproduced on a reduced scale in the Appendix.

Presentation of Test

The test was presented individually to prevent misinterpretation of the directions. A sample form was also given to further insure understanding of the procedure. In this sample, the child was presented with the pictured situation of a child eating, 15 cards picturing foods, and the following directions:

You are going to eat lunch. Choose the food you want to eat.
Put each name in a pile. Will you eat?

Following this sample, two pictured situations, first of a child at the beach and, second, of a child seated at a desk, were presented along with the appropriate written directions, as quoted above. The child and the examiner read the directions out-loud together. The five sets of directions quoted provided the only language needed for the test. As can be seen, this minimal verbal task was simplified to prevent possible inclusion of a test variable; and, as a double check, any key words which could possibly cause difficulty in interpretation were reviewed by the teachers ahead of time in tasks different from the actual testing situation. With these precautions, the children encountered no difficulty in performing the task required, and they participated willingly in the situations.

Validity and Reliability of Instrument

Both the validity and reliability of sociometric measures in general have been extensively discussed in two articles by Mouton, Blake, and Fruchter. Certain variables, such as familiarity of task, have been shown to influence these measures; but, when adequate precautions are taken, this overview of the research indicates that sociometric measures are both satisfactorily reliable and valid.²

Validity of adapted instrument. The instrument used in the present study had the face validity of any sociometric instrument in that it measured choice and perception in situations requiring actual choice and perception. Its validity was strengthened for the deaf group in that its presentation was geared to the language deficit and provided individual treatment, illustration, concrete demonstration, and minimal language requirements. This simplified presentation also facilitated involvement in the test situations for the hearing children.

Reliability of adapted instrument. The reliability of this particular

² Jane Srygley Mouton, Robert R. Blake, and Benjamin Fruchter, "The Reliability of Sociometric Responses," *The Sociometry Reader*, J. L. Moreno, editor (Glencoe, Illinois: The Free Press, 1960), pp. 320-362; and "The Validity of Sociometric Responses," *The Sociometry Reader*, *op. cit.*, pp. 362-388

instrument was checked by a test-retest experience given to a sixth grade group at Morningside School, District 24J, Salem, Oregon, using an interval of one week. An agreement of 75 per cent was found between the test and retest. The reliability was further indicated by the fact that, for all four measures, the result trends were consistent between both situations tested.

III. TREATMENT OF DATA

Measurements Obtained

The data acquired from the sociometric tests allowed four different measures to be obtained for each set of situations:

(1) The "self-accuracy" measure was obtained by summing the errors (without regard to sign) of each individual in his perception of how others would choose him. His predictions of their ratings were subtracted from their actual ratings. According to Schiff, "This score is a measure of one aspect of socioempathy—ability to perceive one's own sociometric status within a group in which one holds membership."³ Low self-accuracy scores indicate few errors or a high degree of accuracy in perceiving the acceptance of others.

(2) The "self-direction" measure was obtained by an algebraic summation of differences between each student's predictions of how each other member would rate him and the actual ratings of the others. A high positive score shows a tendency to overestimate own sociometric status, or self-enhancement. A high negative score shows a tendency to underestimate own sociometric status, or self-effacement.

(3) The measure of "general self-acceptance" was obtained by summing the predictions of each individual of how others would rate him, without regard to the accuracy of this prediction. A high "self-acceptance" score indicates that the individual tends to perceive himself as highly accepted by the members of his group.

(4) The measure of "social expansiveness" was obtained by summing each individual's ratings of others. A high score on this measure indicates that an individual tends to be expansive or highly accepting in his choices of others, and a low score indicates that he tends to reject others.

Statistical Treatment

The data was analyzed first by computing the analysis of variance and then by applying Duncan's new multiple range test to discover exact location of any significant differences.

The analysis of variance. The analysis of variance allows rigid and meaningful treatment of three or more qualitatively different populations. It determines whether the null hypothesis that these groups were drawn from a homogeneous population (with regard to self-concept) must be accepted or rejected by analyzing the variance both within each

³ Schiff, *op. cit.*, p. 686

group (error variance) and among the groups (treatment variance).⁴

Duncan's Multiple Range Test. Duncan's new multiple range test allows multiple comparisons of treatment means following computation of analysis of variance. Based upon the concept of protection levels, it allows a controlled determination of the significance of differences between each pair of treatment means.⁵

RESULTS AND INTERPRETATION

I. RESULTS

The results obtained from the sociometric measures are presented as raw data in Table II. The results of the computation of the analysis of variance are presented in Table III and of Duncan's multiple range test in Tables IV through VII.

Self-Accuracy

The deaf groups were significantly less accurate than the hearing group in their perception of self as rated by their peers in two sociometric situations. On the perceived choices of self to sit nearby in the classroom, both the institutional and non-institutional deaf groups were significantly less accurate at the .01 level. On the perceived choices of self as beach companion, the institutional deaf group was significantly less accurate at the .01 level and the non-institutional deaf group at the .05 level than the non-deaf group.

Self-Direction

No significant difference was found among groups in direction of error, toward either self-effacement or self-enhancement, although there was a trend toward greater self-effacement for the non-deaf group.

Self-Acceptance

The deaf institutional group rated themselves significantly higher, at the .01 level, than did the non-institutional groups—either deaf or non-deaf—on the perceived choice of self as beach companion. On the perceived choice of self as sitting nearby, the deaf institutional group rated themselves significantly higher, at the .05 level, than did the non-deaf group. The deaf non-institutional group did not differ significantly from either the deaf institutional nor the non-deaf, non-institutional group on the latter test, although the trend was in the same direction as for the first—for the institutional group to rate themselves higher than either non-institutional group.

Social Expansiveness

The deaf non-institutional group chose others in its group significantly

⁴ Allen L. Edwards, *Experimental Design in Psychological Research* (New York: Rinehart & Company, Inc., 1960), pp. 117-135

⁵ *Ibid.*, pp. 136-140

fewer times, at the .01 level than either the deaf institutional or the non-deaf group on the test of choosing others to go to the beach. At the .05 level, there were significant differences between means of all three groups. On the test of choosing others to sit nearby, there was a significant difference at the .05 level between the deaf institutional and the deaf non-institutional groups, with the deaf non-institutional group again evidencing a lower choice for members of its own group, and the deaf institutional group evidencing the greatest in-group approval.

TABLE II

SOCIOMETRIC SCORES ON 4 MEASURES OF SELF-CONCEPT, COMPUTED FROM CHOICE OF BEACH AND SEATING COMPANIONS BY DEAF INSTITUTIONAL, DEAF NON-INSTITUTIONAL, AND NON-DEAF NON-INSTITUTIONAL CHILDREN

Measures	Deaf In.		Deaf Non-In.		Non-D, Non-In.	
	Beach	Seat	Beach	Seat	Beach	Seat
Self-Accuracy (errors in)*	184	171	160	173	129	121
Self-Direction /	0	- 7	+ 6	- 17	+ 51	+ 21
Self-Acceptance	575	547	444	498	466	472
Expansiveness	575	540	450	481	517	493

*Due to scoring technique, high "self-accuracy" scores are actually indicative of low self-accuracy and vice versa. Scores represent number of errors in estimating self-acceptance.

/Direction is expressed by algebraic sign. Plus (+) indicates error in direction of self-effacement, minus (-) in direction of self-enhancement.

TABLE III

ANALYSIS OF VARIANCE FOR EACH OF THE CRITERIA FOR THE
SOCIOMETRIC SCORES OBTAINED FROM CHOOSING BEACH
AND SEATING COMPANIONS

Source of Variation	Sum of Squares	df	Mean Square	F
Self-Accuracy				
(Beach) Between	95.042	2	47.521	7.013 *
Within	304.937	45	6.776	
Total	399.979	47		
Self-Accuracy				
(Seating) Between	108.500	2	54.250	8.036 *
Within	303.812	45	6.751	
Total	412.312	47		
Self-Direction				
(Beach) Between	97.125	2	48.563	1.086
Within	2008.187	45	44.626	
Total	2105.312	47		
Self-Direction				
(Seating) Between	48.500	2	24.250	.718
Within	1520.312	45	33.784	
Total	1568.812	47		
Self-Acceptance				
(Beach) Between	615.125	2	307.563	10.194 *
Within	1357.687	45	30.171	
Total	1972.812	47		
Self-Acceptance				
(Seating) Between	181.292	2	90.646	4.348 /
Within	938.187	45	20.849	
Total	1119.479	47		
Soc. Expansiveness				
(Beach) Between	489.126	2	244.563	13.387 *
Within	822.124	45	18.269	
Total	1311.250	47		
Soc. Expansiveness				
(Seating) Between	121.542	2	60.771	3.135
Within	872.375	45	19.386	
Total	993.917	47		

* 1% level of significance (over 5.11)

/ 5% level of significance (over 3.205)

TABLE IV

DUNCAN'S NEW MULTIPLE RANGE TEST APPLIED TO THE DIFFERENCES
AMONG TREATMENT MEANS OF THE DEAF INSTITUTIONAL, DEAF
NON-INSTITUTIONAL, AND NON-DEAF NON-INSTIT. GROUPS
ON THE CRITERION OF SELF-ACCURACY

BEACH:		NDni	Dni	Di	Shortest	
	Means	8.06	10.00	11.50	Significant	Range
					.01	.05
NDni	8.06		1.94	3.44	R ₂ = 2.48	1.86
Dni	10.00			1.50	R ₃ = 2.59	1.95
1% significance *				5% significance *		
NDni	Dni	Di		NDni	Dni	Di
SEATING:		NDni	Di	Dni	Shortest	
	Means	7.56	10.69	10.81	Significant	Range
					.01	.05
NDni	7.56		3.13	3.25	R ₂ = 2.48	1.85
Di	10.69			.12	R ₃ = 2.58	1.95
1% significance *				5% significance *		
NDni	Di	Dni		NDni	Di	Dni

* Any two treatment means not underscored by the same line are significantly different.

Any two treatment means underscored by the same line are not significantly different.

TABLE V

DUNCAN'S ~~NEW~~ MULTIPLE RANGE TEST APPLIED TO THE DIFFERENCES
AMONG TREATMENT MEANS OF THE DEAF INSTITUTIONAL, DEAF
NON-INSTITUTIONAL, AND NON-DEAF NON-INSTIT. GROUPS
ON THE CRITERION OF SELF-DIRECTION *

BEACH:		Di	Dni	NDni	Shortest Significant Range	
Means		0	.38	3.19	.01	.05
D1	0		.38	3.19	R ₂ = 5.60	4.19
Dni	.38			2.81	R ₃ = 5.84	4.41
1% significance /		5% significance /				
D1	Dni	NDni	D1	Dni	NDni	
SEATING:		Dni	Di	NDni	Shortest Significant Range	
Means		- 1.06	- .44	1.31	.01	.05
Dni	- 1.06		.62	2.37	R ₂ = 5.53	4.14
Di	- .44			1.75	R ₃ = 5.77	4.36
1% significance /		5% significance /				
Dni	Di	NDni	Dni	Di	NDni	

* These ~~measures~~ failed to reach significance on the analysis of variance. They were computed again by this test in accordance with Edwards' statement that "In making multiple comparisons among the treatment means, it is not necessary that the treatment mean square of the analysis of variance be significant." (Edwards, op. cit., p. 136)

/ Any two treatment means underscored by the same line are not significantly different.

TABLE VI

DUNCAN'S NEW MULTIPLE RANGE TEST APPLIED TO THE DIFFERENCES
AMONG TREATMENT MEANS OF THE DEAF INSTITUTIONAL, DEAF
NON-INSTITUTIONAL, AND NON-DEAF NON-INSTIT. GROUPS
ON THE CRITERION OF SELF-ACCEPTANCE

BEACH:		Dni	NDni	Di	Shortest Significant Range	
Means		27.75	29.13	36.00	.01	.05
Dni	27.75		1.38	8.25	$R_2 = 5.23$	3.91
NDni	29.13			6.87	$R_3 = 5.45$	4.12
1% significance *			5% significance *			
Dni	NDni	Di	Dni	NDni	Di	
<hr/>			<hr/>			
SEATING:		NDni	Dni	Di	Shortest Significant Range	
Means		29.50	31.13	34.19	.01	.05
NDni	29.50		1.63	4.69	$R_2 = 4.35$	3.25
Dni	31.13			3.06	$R_3 = 4.53$	3.42
1% significance *			5% significance *			
NDni	Dni	Di	NDni	Dni	Di	
<hr/>			<hr/>			

* Any two treatment means not underscored by the line are significantly different.

Any two treatment means underscored by the line are not significantly different.

TABLE VII

DUNCAN'S NEW MULTIPLE RANGE TEST APPLIED TO THE DIFFERENCES
AMONG TREATMENT MEANS OF THE DEAF INSTITUTIONAL, DEAF
NON-INSTITUTIONAL, AND NON-DEAF NON-INSTIT. GROUPS
ON THE CRITERION OF SOCIAL-EXPANSIVENESS

BEACH:				Shortest		
	Dni	NDni	Di	Significant Range		
Means	28.13	32.31	36.00	.01	.05	
Dni	28.13	4.18	7.87	R ₂ = 4.07	3.05	
NDni	32.31		3.69	R ₃ = 4.24	3.20	
1% significance *				5% significance *		
Dni	NDni	Di	Dni	NDni	Di	
SEATING: /				Shortest		
	Dni	NDni	Di	Significant Range		
Means	30.06	30.81	33.75	.01	.05	
Dni	30.06	.75	3.69	R ₂ = 4.19	3.14	
NDni	30.81		2.94	R ₃ = 4.37	3.30	
1% significance *				5% significance *		
Dni	NDni	Di	Dni	NDni	Di	

* Any two treatment means not underscored by the same line are significantly different.

Any two treatment means underscored by the same line are not significantly different.

/ This measure failed by a small margin to reach significance on the analysis of variance. It was computed again by the multiple range test in accordance with Edwards' statement that "in making multiple comparisons among the treatment means, it is not necessary that the treatment mean square of the analysis of variance be significant." (Edwards, *op. cit.*, p. 136).

II. INTERPRETATION OF RESULTS

Self-Accuracy

The results of the self-accuracy measure would tend to confirm the hypothesis that the self-concept of the deaf child is less accurate than the self-concept of the non-deaf child. As institutionalization, intelligence, age, and sex distribution were controlled, the variable responsible for this difference would appear to be communication. These results, then, offer confirmation for the contention of Mead that language is essential to the development of self-concept.

Self-Direction

The lack of significant differences in this measure would indicate that there is no definite direction to the perceptual errors of the deaf group, although the errors for the non-deaf group tended toward self-effacement and the errors for the deaf groups toward self-enhancement.

Self-Acceptance

The significantly higher self-acceptance of the deaf institutional group is in line with the findings of Brunschwig that deaf children tend to rate themselves superior to other children.¹ It might be noted here that Brunschwig drew her population from a residential school and did not control for institutionalization. The results of the present study would indicate that, although self-accuracy is related to deafness, or the communication handicap; self-acceptance may be more a function of the protective institutional environment than of deafness itself.

Social Expansiveness

The differences in social expansiveness were significant between all three pairs of schools, with the deaf non-institutional group exhibiting the lowest expansiveness and the deaf institutional group the highest. The low expansiveness of the deaf non-institutional group may perhaps be explained by the fact that this is the group which is most widely dispersed after school hours. These children are brought to school by taxi from all over the city of Portland and returned to their homes at the close of the school day. Therefore, their school friends and play friends may be entirely different. In addition to this, there is a greater emphasis in day schools for the deaf upon interaction with the non-deaf, perhaps leading to a de-emphasis on cohesion with deaf friends within the school and a tendency toward the second adjustment pattern discussed by Meyerson—rejection of the deaf world and aspiration to the hearing world.²

On the other hand, the high expansiveness of the deaf institutional group may be a reflection of the tendency for this group to form strong group ties within the boundaries of the residential school and to exclude the out-group of the non-deaf world. Although none of the measures specifically tested the out-group exclusion, the tendency is further indi-

¹ Brunschwig, *loc. cit.*

² Meyerson, *op. cit.*, pp. 153; 159-166

cated by the fact that the in-group acceptance was stronger when it involved possible contact with the non-deaf world (going to the beach) than when the contact would be within the institution (sit next to). This trend again coincides with one of the adjustment patterns discussed by Meyerson—withdrawal to the world of the deaf.³

III. SUGGESTIONS FOR FUTURE RESEARCH

The results must be interpreted in recognition of the limitations of this investigation, but the degree of significance found strongly indicates the desirability of a more extended exploration of this problem. Possible extensions would include: (1) a larger population sample; (2) schools with an orientation toward manual communication; (3) schools with supervised oral orientation both in and out of the classroom (residential oral); (4) further aspects of self-concept, such as academic predictions and vocational aspirations; and (5) further investigation of social expansiveness, of in-group versus out-group acceptance, both in residential and in day school settings.

SUMMARY AND CONCLUSIONS

I. SUMMARY

The primary purpose of this investigation was to determine whether the self-concept of the deaf child was different from the self-concept of the non-deaf child. As institutionalization has been considered an important variable in development of self-concept, the present study provided for a three-way control and studied the relations among a deaf institutional group, a deaf non-institutional group, and a non-deaf, non-institutional group of children. Age, intelligence, hearing loss, class range and sex distribution were also controlled.

The problem was investigated within the limits of the self and other in familiar social situations, as measured by a perceptual sociometric instrument. This instrument was chosen because it provided a meaningful task which could be adapted to prevent language loading. Two situations were selected, an informal one involving choice of beach companions and a formal one involving choice of classmates to sit in proximity with self. Each situation was examined in two ways, first to determine actual ratings of others, and second, to determine perceptions of others' ratings of self. The two situations resulted in approximately the same trends.

The results were evaluated using the analysis of variance method supplemented by Duncan's new multiple range test. Significant differences were found between the deaf groups and the non-deaf group in self-accuracy, with the deaf children less accurate in predicting how others would rate them. There were no significant differences in direction of perceptual errors. The self-acceptance of the deaf institutional group was significantly higher than either of the non-institutional groups. On

³ *Ibid.*, pp. 151-153; 155-159

the measure of social expansiveness, the deaf non-institutional children rated others in their group significantly lower than either of the other groups, with the deaf institutional children giving the highest ratings to their classmates.

These results were interpreted as indicating that the accuracy of self-concept of the deaf child is hampered by his language deficit, regardless of his residence in an institution or at home. The tendency to high acceptance of self and others in the in-group of the residential school for the deaf was regarded as a different factor, dependent more upon the institutional living than upon deafness *per se*.

II. CONCLUSIONS

As the accuracy of self-concept cannot be attributed to—nor excused by—institutional living, a greater responsibility would seem to fall upon schools for the deaf, both day and residential. Education for an accurate concept of self could well be justified as a primary means for providing clearer boundaries for both old and new psychological situations. A fairly definite idea both of his own limitations and of his own assets would provide the deaf child with a more stable working base and would reduce the strangeness of unknown situations by giving a known point of reference—the self. Further, increased self-confidence, or confidence in accuracy of self-evaluation, should encourage more exploration into new situations, in turn allowing more frequent experiences and a better differentiated concept of self.

Of the possible suggestions for improving self-concept, the following appear most relevant. First, a need is indicated for greater educational attention to this problem of the social self—the self rising out of social interaction—in addition to present education which is more directly academic. The vocabulary, or more broadly, the language taught, might well be examined and assessed for possible inclusion of items and concepts pertinent to facilitating more precise communication in social interaction. Second, more emphasis could be placed on self-evaluation, rather than on rewards and punishments of external authority figures, in all forms of curricular and extracurricular activity. This would allow more self-involvement and more practice in evaluating self than is offered by the imposed evaluations of the teacher, the supervisor, or other authorities. Although the present study offers no evidence for the effectiveness of either of these changes, it does indicate that changes in this direction are in order.

The findings on the in-group acceptance matrix of the deaf residential school are not so readily evaluated in positive or negative terms. An examination of their ratings of out-group members is needed as a complement to the present data, allowing fuller implications to be drawn. This study demonstrates, however, that the deaf institutional group has a high in-group cohesiveness, which the deaf non-institutional group does not, and indicates that adjustment patterns may well be related to type of school attended. It might be noted here that Meyerson¹ considered neither of these patterns ideal, but rather emphasized a fuller awareness

¹ Meyerson, *op. cit.*, pp. 166–176




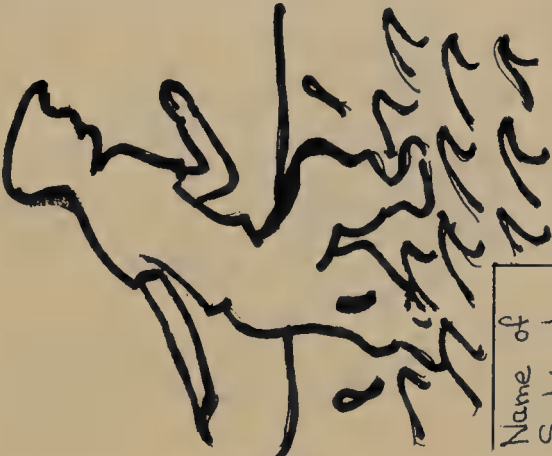
of self, an awareness of boundaries existing for the deaf person, both because of his deafness and because of his assets and liabilities as a person. Interpretation of the data in this way would provide another argument for implementing the teaching of accurate self-evaluation to all deaf children, in both residential and day-school settings.

In conclusion, this investigation has disclosed significant differences in self-concept between the deaf and the non-deaf child. The results support the hypothesized dependence of self-concept upon language development, and suggest that this aspect of the deaf child's education needs greater stress.

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 Yes	 Maybe	 No
<div><div>Name of Subject</div></div>		

Name15

Name2




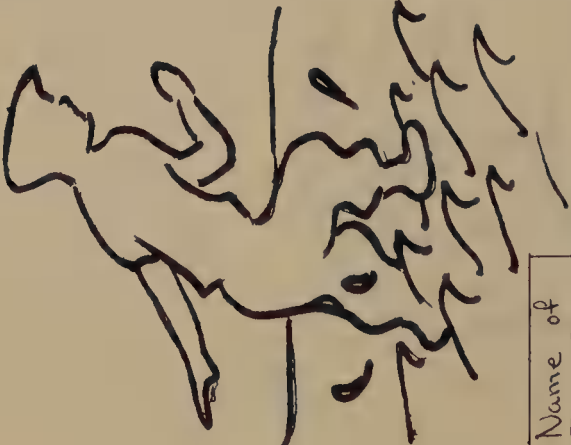
Name1

You are going to the beach.
Choose the boys and girls
you want to go with you
Put each name in a pile.
Will you take _____?

ADAPTED SOCIOMETRIC TEST FORM

Situation 1a*



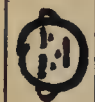

*Actual Size of Main Chart: 48" by 18"

 Yes	 Maybe	 No
<div><div>Name of Each Peer</div></div>		

Name of Subject

ADAPTED SOCIOMETRIC TEST FORM
Situation 1b *
* Actual Size of Main Chart: 48" by 18"

_____ is going to the beach.
He can choose the boys and
girls he wants to go with him.
Will he take you?
Put your name in a pile.

	 Yes	 Maybe	 No	
---	--	--	---	--

Name of
Subject

You are going to a new room,
Choose the boys and girls
you want to sit near you.
Put each name in a pile.
Do you want _____?





Name
1

Name
2

Name
15

...

ADAPTED SOCIOMETRIC TEST FORM
Situation 2a*
* Actual Size of Main Chart: 48" by 18"

 <div data-bbox="703 1679 797 1860">Name of Each Peer</div>		Yes		Maybe		No

Name of
Subject

ADAPTED SOCIOMETRIC TEST, FORM
Situation 2b*
*Actual Size of Main Chart: 48" by 18"

_____ is going to a new room
He can choose the boys and
girls he wants to sit near him.
Will he want you?
Put your name in a pile.

Evaluation of the Effectiveness of the Leadership Training Program in the Area of the Deaf at San Fernando Valley State College

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As pointed out in another paper, *Graduate Students in the Area of the Deaf and the Graduate Record Examination*, a five-year program was initiated in 1962 for the purpose of training leaders to work in the field of the deaf. The program provided for an intensive course of seven months for, initially, a group of ten persons. (In 1965 the number was increased to 15.) All care was taken in the planning to insure the choice of outstanding administrators or teachers.

It seemed axiomatic to those planning the course that there should be a careful evaluation of the program for a number of reasons. Important among these was the fact that it was a completely new program, in a college which had not specialized in training teachers of the deaf. Then, too, the U.S. Vocational Rehabilitation Administration had agreed to finance the project. But when an evaluation proposal was submitted the National Advisory Council on Vocational Rehabilitation refused to give a grant for it.

This refusal was important as it unexpectedly placed those who were working on this aspect of the project in a very favorable position. The Director of the project, Dr. Wayne McIntyre, and his staff decided that as much of the evaluation as possible should be carried out with whatever resources might be available. The important thing was that in evaluating the program the staff members were free to do what they wished and were in no way responsible to any outside authority. The freedom that this offered has been very valuable. I, personally, was not, nor am I, a member of the project staff and though I have worked closely with Dr. Wayne McIntyre, his successor Dr. Ray L. Jones, and the staff members, I have been almost completely independent. I have as a result been able to work on the evaluation virtually as an outsider. That Dr. McIntyre and Dr. Jones have felt comfortable with this arrangement is a tribute to their belief in the program and its effectiveness. This explanation is necessary if the changes in the evaluation proposal are to be fully understood.

Originally, it was proposed to try to answer two questions:

- (1) Was the program achieving its stated goals? and
- (2) To what extent did the graduate students in the field of the deaf differ, if at all, from other graduate students in the field of school administration and supervision?

Answers to the second of these questions were vital if the program was going to meet the special needs of the students in it.

The evaluation design, as originally proposed, called for pretest and posttest using a wide battery of instruments; it also called for follow-up studies of graduates. Two control groups were to be used—one drawn from graduate students at San Fernando Valley State College and the other from administrators and teachers in the field of the deaf. With the denial of a grant most of the plans had to be abandoned and we were forced to proceed with the pretest and posttest of the students in the program, using a limited number of tests. We were faced with all the attendant disabilities of a study using a single group.

One of the uncontrolled variables should be mentioned here. Success of the study depended upon the cooperation of the students, under somewhat distracting conditions. It was important to test them as early as possible in the program and again as late as possible. In effect this meant testing students busy with settling into a new area. The retest had to come almost simultaneously with announcements of final grades and amid last minute preparations to return home. Conditions were far from ideal. Then, too, there was the nationwide attention focused on them and their realization that they as well as the program were under the spotlight of the deaf community. It would be unwise to ignore the possibility of some of these factors influencing their motivation. That the students cooperated as splendidly as they did is deserving of high commendation.

Tests Used

Most of the tests chosen were already being used in a study of graduate students in the field of school administration, directed by Edgar L. Morphet and William C. Schutz for the California Commission on School Administration. Those tests that were retained after the first year were:

FIRO B—A measure of an individual's reported, expressed and wanted behaviors in the areas of inclusion, control and affection.

FIRO F—A measure of an individual's reported feelings in the same areas.

MBTI —Myers Briggs Type Indicator. A personality test made up of four independent bi-polar scales corresponding to four pairs of "types" or orientations towards the world. The scales are defined as

- | | |
|-------------------------------|-------------------------|
| (a) Extroversion-Introversion | (b) Intuition-Sensation |
| (c) Feeling-Thinking | (d) Judgment-Perception |

Education Values—Measures opinions about various aspects of what should happen in the school situation.

Cooperative English—Measures vocabulary, speed and level of comprehension, and total reading ability.

Graduate Record Examination (This test is required of all students wishing to enter graduate programs at the College.)

A scholastic aptitude test and a vocabulary were abandoned after the first year as they duplicated to some extent the Cooperative English and the GRE; a comprehensive test of knowledge of subject matter was also abandoned. The improvement shown during the year was so obviously in the expected direction that repetition would have been largely a duplication of evaluation procedures in the courses taught. In the second and third years the GRE was given both as a pretest and a posttest since,

during the first year, there were grave doubts that the test accurately indicated students' abilities.

The lists were administered in the first and the last weeks of the program and the results made available to the students as quickly as possible. Each was given the opportunity to discuss them with me or a member of the College counseling staff and the interviews that took place helped greatly in providing information about student reaction and in explaining the reasons behind some atypical scores; for example, there were two occasions when directions had not been followed correctly.

The results of the tests were of great value to the staff. Each year a staff meeting has been held in the second or third weeks to pool information about students and to tailor the program to fit individual needs; at the conclusion of the program a similar meeting has been held to review the year's work. At these meetings test results confirmed or raised questions about staff observations. There were a number of times, too, when the results gave important insights that permitted the staff to do a better job with individual students.

Results

The FIRO tests revealed little about the groups as a whole. There was one significant change in the area of inclusion. In this they revealed stronger positive feelings about being "invited to things."

Marked changes occurred in the areas measured by the MBTI. There was movement away from introversion; the extroversion score remained fairly stable. In the other pairs the changes were in the same direction each year; from *sensing*, preferring a literal, factual conventional reading of the world towards *intuiting*, preferring a figurative, imaginative unique reading of the world; from *thinking*, with judgments mediated by rationality and judiciousness towards *feeling*, with judgments mediated by compassion and emotion; from *judging*, creating an ordered world and preferring to act from preformed notions, towards *perceiving*, preferring a casual, changing world and to act immediately and spontaneously.

There were a number of changes revealed by the Educational Values Test. Three were in the area of feelings. The students were more in favor, at the end of the program, of encouraging children to express warm feelings openly, expressing feelings openly to children, and having administrators more friendly with teachers. They favored more, too, having administrators getting to know community members personally.

The remaining three changes were in the area of inclusion. They were more in favor of teaching children to be socially accepted, including teachers in school activities, but they favored less the idea of having administrators inform communities of policy and changes in policy.

The Cooperative English test also revealed changes. The mean January percentile for Reading Total was 46 and that for August 60. Individual changes of from 11 to 61, 29 to 61, 36 to 61, 46 to 71, and 36 to 61 were recorded.

But it was in the GRE that the most dramatic individual changes occurred. The average gain of 85 points on the combined verbal and quantitative sections hides the fact that there were changes of 210, 160, 150, 110, and 100 in individual cases. In 16 cases the scores were raised; in 12 of them by 50 points or more. The mean gain on the verbal section

was 41. Of the 1963 and 1964 students, 14 improved both their Cooperative English and GRE scores.

As the preceding indicates, presenting mean gains hides important facts. In all tests there was evidence of dramatic changes in individual students. For some, work in the program coincided with periods of marked change; there were others who appeared not to change at all.

The greatest value of the tests lay in the information they provided about the individual student. They offered much in addition to what was learned from other sources. It was possible at the beginning of the year to see that certain students would have difficulties because of their reading skills; some would be unlikely to change; some would need help in meeting the problems created by interpersonal relations in the group. To assume the role of student and to work intensely in a group over a period of seven months, a group subject to all kinds of pressures, was a major challenge to many and the test results frequently helped the staff to anticipate and understand individual reactions.

One overall impression that the test results create is that there was a movement in many cases towards greater concern with the individual, together with an increased realization of the importance of sensitivity, warmth and acceptance in interpersonal relations. It is in these areas that the program may be having its most important impact.

1. Schutz, W. C., and Morphett, E. L., *Procedures for Identifying Persons with Potential for Public School Administrative Positions*. Berkeley, California: University of California, Berkeley, 1961.

Fingerspelling in the Oral Classroom

MRS. CHARLOTTE STAFFORD, M.E.

Day Class for the Deaf

Painesville, Ohio

There was a flutter of fingers under cover of the desk. A quick glance from the boy across the room alerted me to some mischief brewing in my class of deaf children. While pretending not to watch, I really was observing them out of the corner of my eye. I was sure that I saw the boy nod in my direction and shake his head as if in warning. Could this be fingerspelling on the sly?

My training as a teacher of the deaf had been all by the oral method of instruction. In my studies I had read about fingerspelling and the language of signs but these were just words to me. I was an oral teacher and this was an oral class—amen.

That evening I settled down to some serious homework—learning more about fingerspelling. The little book *Communication With The Deaf* was an eye-opener for me.* It contained a chart of the manual alphabet with a very interesting article by Edward L. Scouten "Helping Your Deaf Child to Master English Through Fingerspelling." In this article Mr. Scouten likened fingerspelling to writing in the air which is one of the methods presented in the Scott-Foresman teachers' manual, second grade language arts program. I was well acquainted with this method since I had taught second grade before training as a teacher of the deaf.

With a little concentration I mastered the manual alphabet before I went to bed that night. Armed with my new knowledge, I quickly captured the attention of my class by fingerspelling the word "car." The little girl who had been surreptitiously fingerspelling the day before nearly fell out of her seat in astonishment. She couldn't believe her eyes, for she said out loud "car"? and then pantomimed driving a car to make sure we understood each other.

The boy who had been so cautious yesterday, beamed at me with delight. Like a flash his fingers flew into action, but I had to admit that I was only an amateur. He quickly recovered from his disappointment as he found our roles reversed—I the student and he the teacher. I showed that I was eager and willing to learn how to fingerspell if they would only teach me. One other boy in the group knew the manual alphabet fairly well, so that three of my nine pupils could fingerspell. All of the children were oral, but had very poor speech.

In my college preparation courses I was told that deaf children learn

* *Communication with the Deaf*, Powrie V. Doctor, Ed., published by the Conference of Executives of American Schools for the Deaf, *American Annals of the Deaf*, Gallaudet College, Washington, D. C.

with their eyes through lipreading, what hearing children learn with their ears and eyes. I was told that since only 40% of what we say is visible on our lips, learning is that much more difficult for the deaf child, but there were no suggestions as to how we might overcome this handicap. Write the word, of course, so that the deaf child can see it in print, but this is not always possible or convenient.

I remember how surprised I was to find out that most deaf children 11 or 12 years old, do not know the names of the letters of the alphabet. To be sure they knew all the sounds on the Yale Chart, but c and k were the same sound, s was always "ssss," c was never "see" as in *city*, t and d, p and b, were indistinguishable from each other. I could not orally spell a word for the child's help. He always had to see it written out and of course, he wanted to copy it rather than remember how it was spelled.

The Grace Fernald remedial method of finger-tracing the written word, then erasing the word, and having the child write it from memory is very good but time consuming. In my preparation to be a teacher of the deaf, there was no mention of teaching the child fingerspelling, because that was not considered legitimate in an oral class.

After I read about the Rochester Method which is a combination of fingerspelling and oral talk, and the experimental work that is being done at Riverside in California, and the Louisiana State School for the Deaf, I decided to experiment myself.

Three children in the class knew the manual alphabet well enough to use it. Four others soon "picked it up" on their own with no direct help from me, and two children thought it was too difficult to bother with. I did not insist on anyone learning to fingerspell. I used it myself along with voice, and set up a permissive atmosphere in our classroom. Fingerspelling was no longer a "dirty word."

Under these new conditions, the little girl who had been fingerspelling on the sly, confessed that her mother slapped her hand whenever she fingerspelled at home, but her daddy said it was O.K. How is that for a house divided? Or a child bewildered? At conference time I had a heart-to-heart talk with her mother and we came to a mutual understanding. Some parents need as much help as their children!

No one in our group fingerspells whole sentences—we are too slow. It is quicker and easier to talk. If I can't understand what a child is saying he will fingerspell a word or two, but I must admit that I am pretty slow at receiving.

Fingerspelling has been the most help with our spelling lessons which paradoxically have become much more oral since we have learned to fingerspell. Sometimes we use pictures (Ideal Charts have fine colored pictures without printed words) or we use an actual object or garment, or a picture of an animal, car, or bike drawn on the board. We list as many words or parts as we can identify. We orally say the word, fingerspell, and write the words. To give practice in receiving, we take turns silently fingerspelling a word from the list, and the others say the word.

I often see a child with his pencil in his right hand poised above his paper ready to write, while his left hand flutters in fingerspelling as he

tries to remember how to spell the needed word. It is as if the kinesthetic feel of how the word is formed helps his recall. I am reminded of the hearing person who says, "If I only had a pencil and paper and could write that word down, I would know how to spell it." Or the one who writes in the palm of one hand with his fingers of his other hand holding an imaginary pencil—he is getting the "feel" of how the word is written.

Fingerspelling is just another means of communication in our classroom. It has helped our spelling, and our speech because the syllables which are not visible on the lips are included in our fingerspelling of the word. The class is more oral than it was before and the relaxed atmosphere is surely conducive to better learning.

GALLAUDET COLLEGE HONORS

In connection with the one hundred and first Commencement Exercises on Monday, June 14, 1965, Gallaudet College, Washington, D. C., conferred seven honorary degrees. The citations were as follows:

Ladislaw Stephen Cherry

Ladislaw Stephen Cherry was born in Poland, and came to this country when his family immigrated in 1904. He attended several schools for the deaf, graduating from the Illinois School in 1918 and from Gallaudet College in 1923. After leaving this college he joined the home office staff of the National Fraternal Society of the Deaf, and has been with this organization ever since. Since 1959 he has been its Grand President and Editor of its journal, *The Frat*.

This Society, established in 1901 to provide insurance for deaf persons who could not obtain it elsewhere, has grown into the largest business enterprise in the world for the deaf. Anyone familiar with the complexities of modern economics can understand what study and what leadership was necessary to keep this Society growing and flourishing. For his services to the deaf of this country he has been honored by the Illinois School for the Deaf, by the Kappa Gamma Fraternity of this College, and by the Society itself. All deaf persons in this country have reason to be grateful for his achievements.

Doctor of Letters

Charles E. MacDonald

Charles E. MacDonald, born in Halifax, Nova Scotia of deaf parents, became a teacher in the school for the deaf in that city, and in 1922 came to the United States to teach in three different schools for thirteen years before graduating, in 1936, from Rutgers University with the degree of Bachelor of Science in Education. In 1935 he returned to Canada, to the Jericho Hill School for Deaf and Blind Children in Vancouver, where he has been to this date. As superintendent of his school he has guided its growth in enrollment, physical facilities, and curriculum until it has reached its present position of eminence in western Canada.

It would be difficult to name any one in his country who has made similar contributions to the education of deaf children and to the welfare of deaf adults. Certainly no one has served them longer if as well. In recognition of the talents and the devotion that he has brought to his profession, the Western Canada Association of the Deaf gave him its Award of Service in 1963; in 1953 he was awarded the Queen Elizabeth Coronation Medal; and in 1937 the King George VI Coronation Medal. The Blackstone College of Law in Chicago awarded him the honorary degree of Doctor of Laws in 1942. We of Gallaudet College are pleased to take this notice of the exceptional services of this exceptional man.

Doctor of Letters

Homer Earl Grace

Homer Earl Grace is another of Gallaudet's graduates whose life has been given freely and without reserve to the service of others. Graduating from the Kansas School for the Deaf in 1906, he came to this college and earned his bachelor's degree in 1911. At St. John's College in Colorado he was a member of the seminary class of 1924; and in that year was ordained a priest of the Episcopal Church and assigned as a Missionary to the Deaf in the Province of the Northwest. Until he retired in 1963 he served this large area, including Denver, Colorado Springs and Pueblo in Colorado; Omaha in Nebraska; Des Moines in Iowa, Faribault and St. Paul in Minnesota; and Sioux Falls in South Dakota. He found time in his travels and his ministering to support the National Association of the Deaf, the National Fraternals Society of the Deaf, the Colorado Association of the Deaf, and was a charter member of the Kansas Association of the Deaf.

His home during these years was in Denver, and he looked often at the mountains rising west of that city. In the words of one of his own sermons: "if we had no difficult hills of life to climb, we would be a practically useless people." It is clear that he climbed often, and that all who knew him were most usefully inspired by the strength he had gained in the ascent.

Doctor of Humane Letters

Edwin W. Nies

Edwin W. Nies came to Gallaudet College from the Lexington School for the Deaf in New York City, and graduated in 1911. He then entered the Dental School of the University of Pennsylvania; and after his graduation in 1914 he continued the practice of dentistry until 1962, serving as staff dentist to the Lexington School for forty-seven years, to the New York School for the Deaf for forty years, and as a member of the staff of the Knickerbocker Hospital for fifteen years. During much of this time, for twenty-five years, he had served as lay reader at St. Ann's Church for the Deaf, founded by the Reverend Dr. Thomas Gallaudet, the first church in this country for deaf persons. From 1947 to 1949 he studied privately for the priesthood, and following his ordination in 1949 served as Vicar of St. Ann's Church until 1964, when he retired.

This account marks only the principal features of his career, and records only briefly his many and continued services to deaf people in mission stations, as visiting chaplain, as officer and director of professional and religious organizations. His life may have been too full for a brief summation, but we of this college should like to raise him as an example of what we hope to achieve here: the full and good life lived with a full return of one's gifts to his fellow man.

Doctor of Humane Letters

George Edward Muth

George Edward Muth, a fourth generation Washingtonian, was graduated from the George Washington University with a bachelor's degree in 1931 and with the degree of Bachelor of Laws in 1934. He was ad-

mitted to the Bar of the District of Columbia in 1933, and was associated with a law firm of this city for twelve years, from 1924 to 1936. In that year, on the death of his father, he became president and Treasurer of the George F. Muth Company, the leading art supply firm of this city, and from this position had consistently sought this city's improvement.

Few men have had either the talent or the time to support so many worthwhile civic, cultural, educational, philanthropic, and religious activities. He has been a member of the Board of Directors of the Arts Club of Washington for more than twenty years and was several times its President. He was one of the original sponsors of Washington's Outdoor Art Fair, and is frequently a judge at local art exhibits. He has been a member of the Friends of the Corcoran Art Gallery, of the Art League of Northern Virginia, of the Art Director's Club of Northern Washington, and of the Fine and Applied Arts Committee of the Graduate School of the United States Department of Agriculture.

His own university, George Washington, he has served for six years as Alumni trustee. We know him best as a Life Member of our Board of Directors, in which capacity he has served as Secretary, Vice Chairman, and member of the Executive, Education, and Building Committees. That the college has profited from his guidance is evident in the advances made here during his association with us.

Doctor of Laws

Nathan Poole

Nathan Poole is another distinguished citizen of this community who has given many years of his life to the service of Gallaudet College. Like others of our Directors, he is a native of Washington. He graduated from Benjamin Franklin University in 1940, cum laude, with a master's degree in commercial science, and has since specialized in real estate. He is a past director of the Washington Real Estate Board and of the National Association of Cost Accountants; and for many years was president of one of Washington's oldest realty corporations. In 1960 he was cited by the International Traders Club for constructive contribution to the literature of real estate trading.

For twenty-five years he has been a member of Gallaudet's Board, succeeding his father who served on this Board before him. This history of long service by such eminent men is a guarantee of stability to the college; and though he and the other members of our Board are largely unseen by our faculty and students, the results of their patient endeavors are in evidence everywhere around us.

Doctor of Laws

Warren R. Forster

Warren R. Forster, a native of Washington, was educated at Phillips Exeter Academy and at Harvard University. He has made his entire career in banking and finance, first in New York City, then here in Washington, where he has served as officer in a number of eminent institutions. He has been Senior Vice President and Director of the Hamilton National Bank; Senior Vice President and Director of the

National Bank of Washington; President of the Munsey Trust Company; and since 1958 the Chairman of the Board of Directors of the Union Trust Company.

Since 1955 he has been Dean of the Washington Chapter of the American Institute of Banking, a frequent lecturer in various graduate courses. He has been Chairman and member of several committees of the District of Columbia Bankers' Association; in 1956 Second Vice President of the Association; in 1957 First Vice President; and for the year 1958-1959 its President. He is a Director and Treasurer of the National Insurance Company of Washington.

A distinguished financier, he has been decorated by the French Government and named a Chevalier du Merite Commercial. The Washington Chapter of the American Institution of Banking, in 1963, gave him its first Distinguished Service Award. Distinguished as a citizen also, he has been awarded the Selective Service Medal for twenty years of duty in the Selective Service System. Any college, to prosper, must be able to attract men of his quality to its governing board.

Doctor of Laws

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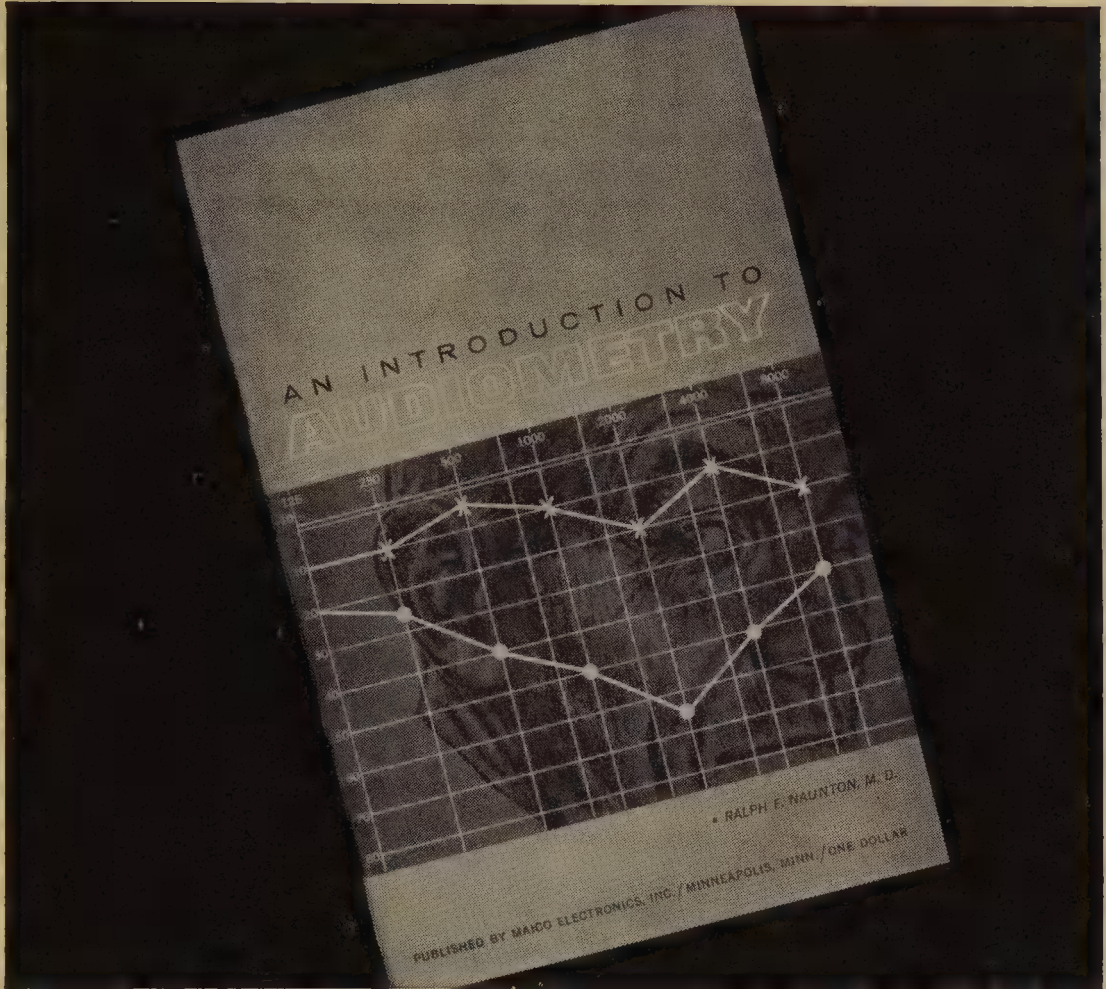
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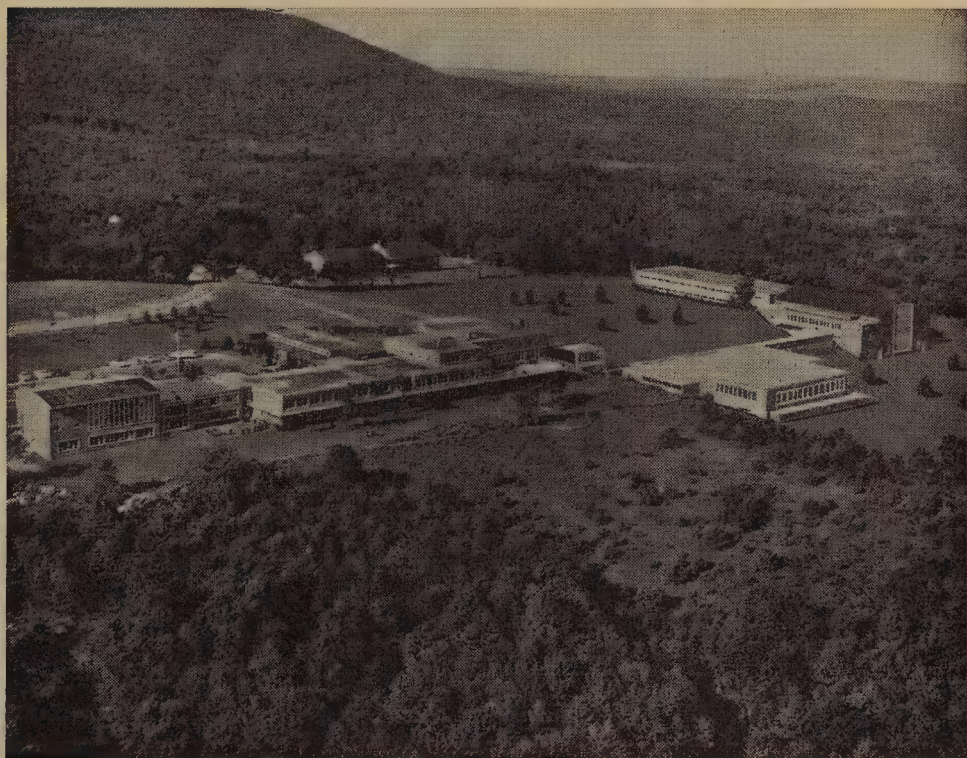
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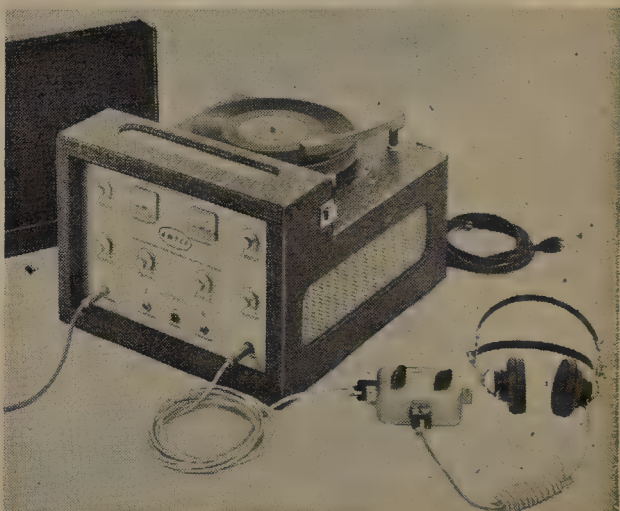
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